



Electronic Data Reporting Template

Guidance Activities Results Report (Large Group)

School: Karl G. Maeser Preparatory Academy, Lindon, UT

Target Group: 9th and 10th graders

Target Group selection is based upon: 9th and 10th grade students who had failed a math or science course

Key Word: Study Skills, At-Risk Students, Math and Science Retention

ABSTRACT

The 2009 Maeser data project sought to answer the question, “do academic support classes make a significant difference for students?” Two academic support classes were created for identified at-risk 9th and 10th grade students who had failed either a math or science course the previous semester. The students were provided additional assistance and were taught by a certified math or science teacher who monitored their progress, while providing additional support and study skills. At the conclusion of the 3rd term, students averaged a .52 GPA increase and failed .67 fewer courses compared to the prior semester. However, students in a control group, and lacking the additional study skills support, also had a .27 GPA increase and failed .35 fewer classes compared to the prior semester. The findings suggest that the support classes do make a difference in GPA, but not as significantly as originally hypothesized. While there is some merit in offering support classes, the benefits do not seem to justify the costs. Implications for future remediation are discussed.

PROJECT DESCRIPTION

- At the beginning of the 2nd semester, January 2009, counselors and administration created a new program for at-risk students involving study skills for math and science remediation because data showed many students were failing academically and were at-risk of not graduating.
- Accordingly, two academic support classes were created for students struggling or failing in either a first semester math or science class (Fall 2008). These additional support classes were offered to supplement an already existing study skills class.
- The school was interested in knowing what effect there might be in terms of student performance by having taken an additional academic support class. What increase in student performance might be expected and do the additional resources warrant the increased level of support?

INTRODUCTION

- Karl G. Maeser Preparatory Academy is a second year public college preparatory charter school located in Lindon, Utah. The high school (grades 9-12) first opened its doors in the Fall of 2007 with a student enrollment of approximately 150 students, growing to an enrollment of 225 by the Fall of 2008. Since the mission of the school is to provide a “rigorous, classical college-preparatory education,” there is considerable pressure to help students succeed academically and help the students measure up to future college expectations. However, because of its open-door admission policy as a public school, there are many current students lacking the necessary tools to live up to school’s intended ideals.
- In an addition to the genuine interest in helping students’ succeed, there are also considerable budget implications associated with lost revenue resulting from student attrition. Therefore, additional proactive efforts have been made the school board, faculty, administration and counseling office to help these students succeed. In light of these interests, the school created the additional classroom supports to help student’s struggling in their math or sciences courses.

PARTICIPANTS

- Administrators and counselors selected 33 students (9th and 10th graders) who were identified by teachers as at-risk or who had earned lower than a C grade in their fall semester math or science courses.
- Two additional courses were created in the Winter semester, one of the courses was euphemistically called Math Lab, and the other was given the appellation, Science Lab.
- Class size was limited in both classes to 15 students per section and taught by certified teachers who monitored student’s academic progress during the entire 3rd term.

METHODS

- Thirty-three struggling math and science students were placed in either a math or science lab with a certified math or science teacher. Because the classes were kept purposefully small, students were given lots of personal interaction and opportunities to utilize time, reinforce concepts, ask questions and seek help with daily home work. No specific curriculum was introduced in the two classes. The assigned students remained in their respective math or science labs during the duration of the 10 week 3rd term. Pre and post-GPA's, along with average class failure rates were then computed at the conclusion of the 3rd term.
- A control group of students not attending a student support class was also evaluated to determine what extent the support classes were making a difference in student success. The pre and post GPA's of the students, along with their average class failure rates was also computed at the end of the 3rd term.

RESULTS

When evaluating improved GPA performance and decreased failure rates, the academic support classes appeared to help most students achieve greater success in the following term. Students in the two courses had a mean GPA improvement of .52 and reduced the number of failed courses from nearly 2 classes per term (1.73 average) to almost 1 class per term (1.06).

Results of Data Project

Term 2 GPA for support group:	2.17	2 nd Quarter Failure Rate:	1.73
Term 3 GPA for support group:	2.69	3 rd Quarter Failure Rate:	1.06

A control group of 45 9th and 10th grade students not attending the math or science lab classes were also evaluated to determine to what extent the support classes were making a difference in student success. The control group (selected from Socratic seminar class or English/History) was selected to determine if other variables might

account for the decrease in failure rate and GPA improvement of students enrolled in the academic support classes.

Results from Control Group (no academic supports provided)

Term 2 GPA for support group:	3.06	2 nd Quarter Failure Rate:	0.63
Term 3 GPA for support group:	3.33	3 rd Quarter Failure Rate:	0.28

DISCUSSION

The results measured by the control group (where no academic supports were provided) diminishes the apparent significance of GPA gains seen in the results of the students that were given additional academic supports by licensed faculty. Since all students in the study saw an average improvement of 0.27 in their GPA, other unaccounted variables seem to have influenced the observable gains. Anecdotally, many of the teachers attributed the overall GPA gains seen in all students with the reduced amount of daily home being assigned in all classes. Some teachers felt the improvement in grades was not a reflection of study skills, but a reduction in course expectations for the course, specifically assigning less daily homework.

Speculating, it would seem logical that students GPA's and accompanying lower class failure rate would be observed, since practically speaking, students in a study skills class had been given one less class that might impact overall GPA performance. It would also seem intuitive that student performance would naturally improve given the fact that students were provided an additional "tutoring hour" to complete math and science home-work daily. Who wouldn't like an additional "free hour" to complete assigned home work each day?

The administration and school board must now determine if the adjusted improvement (approximately 0.25 GPA) warrants the current allocation of resources to offer either general study skills classes or specific study skills courses in mathematics or science.

Although there may be a tendency to automatically attribute student success to the inclusion of study skills classes, the results of this study raise further questions about the most effective ways of raising student performance and whether just providing additional study time will make a significant difference. Will a student whose fundamental issues relate to apathy or motivation benefit simply by given an additional study time? It begs the proverbial question, “which came first, the motivation issue or the poor academic performance”? While there is some merit in offering support classes, the benefits do not seem to justify the costs.